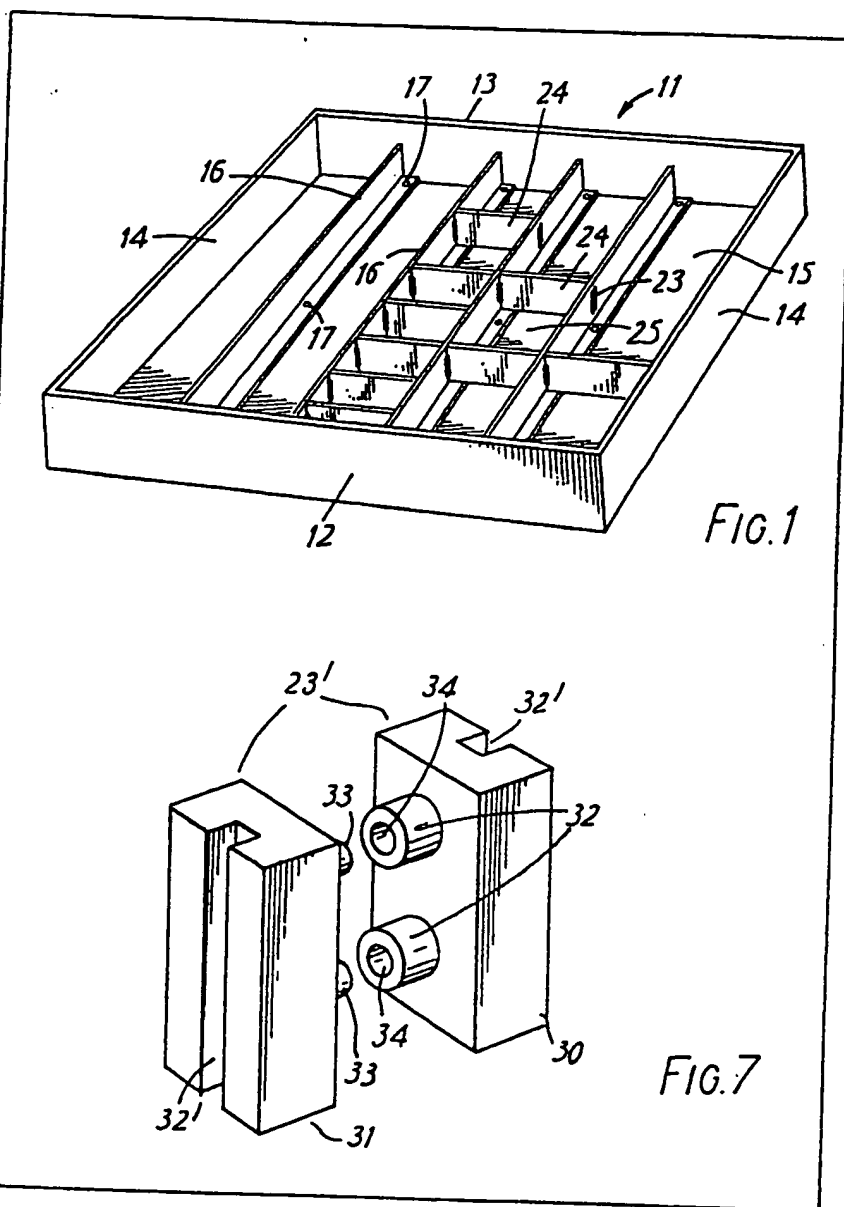


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(54) Drawer divider

(57) A system for dividing drawers comprises wall members (16) for dividing a drawer (11) in a first direction. The wall members are secured to the floor of the drawer by screws (17). Dividers (24) divide the spaces between

adjacent pairs of wall members (16) in a second direction at right angles to the first. Each wall member (16) includes a series of horizontally spaced apertures and inserts (23) which have vertical grooves (26) in their sides to provide slots for locating the ends of the dividers (24), are placed in selected said apertures.



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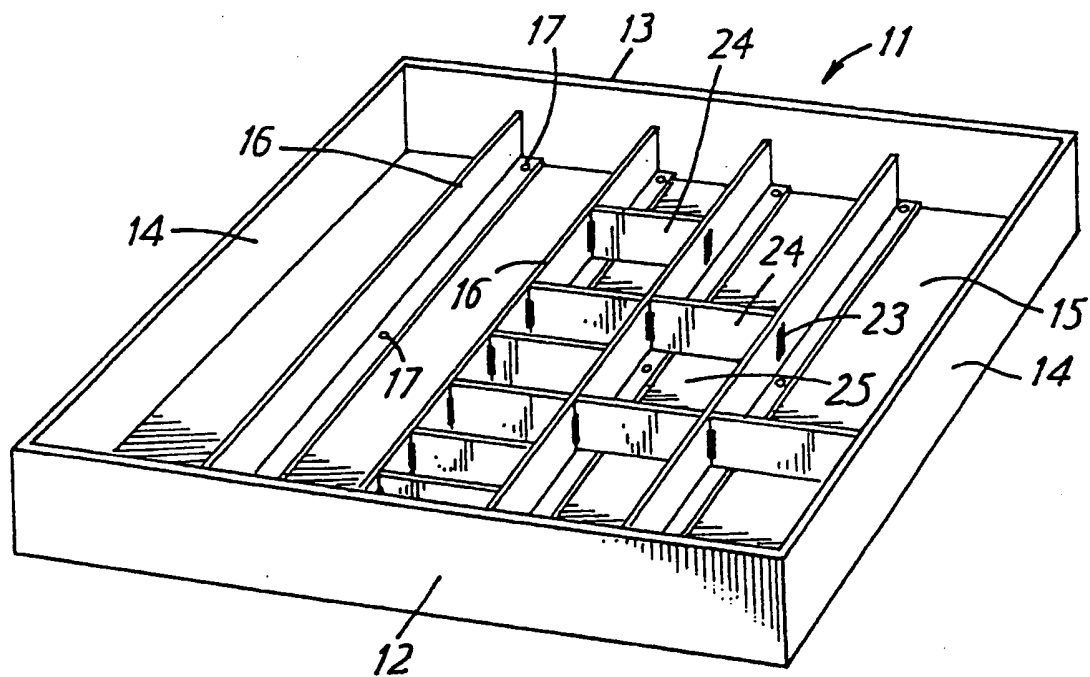


FIG. 1

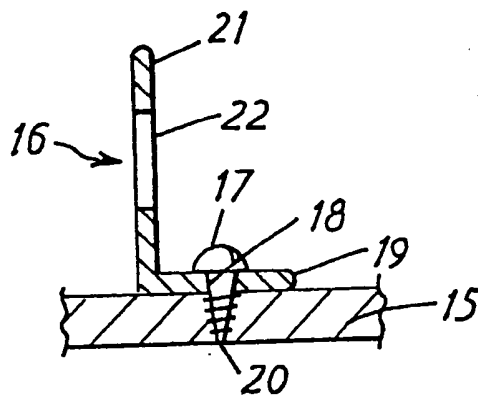


FIG. 2

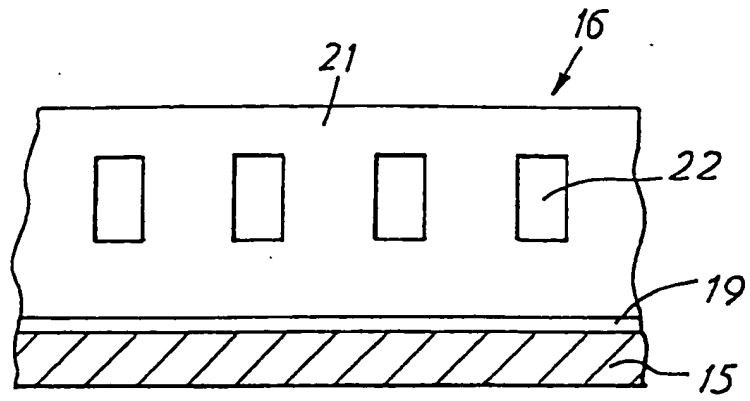


FIG. 3

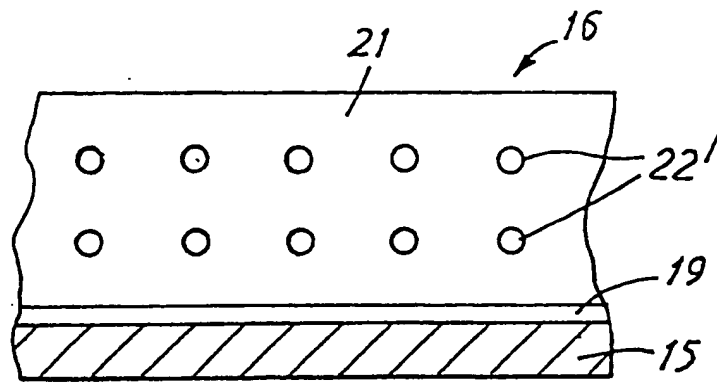


FIG. 4

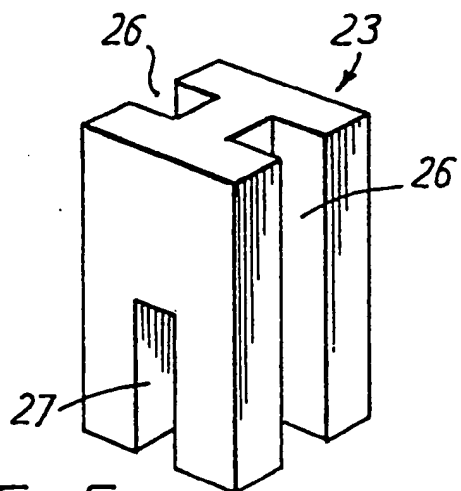


FIG. 5

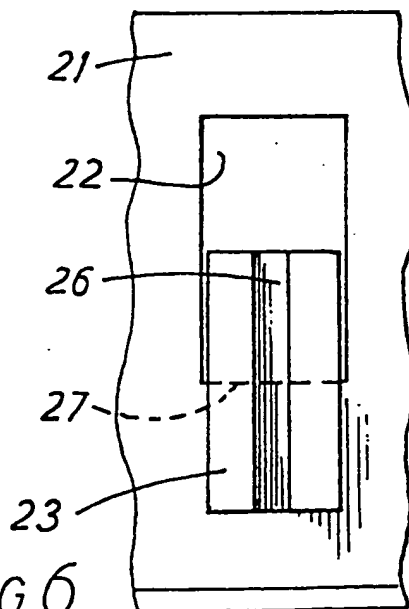


FIG. 6

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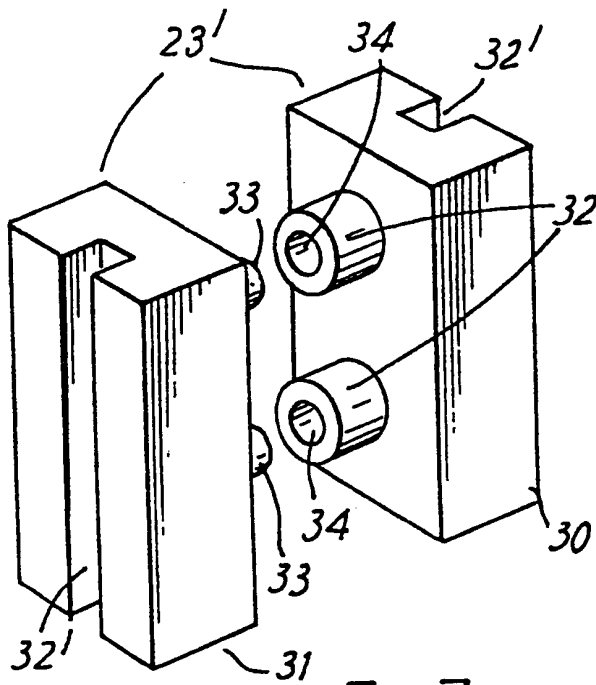


FIG. 7

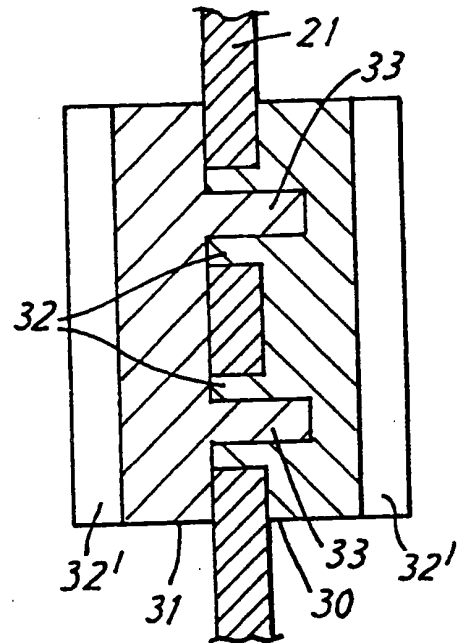


FIG. 8

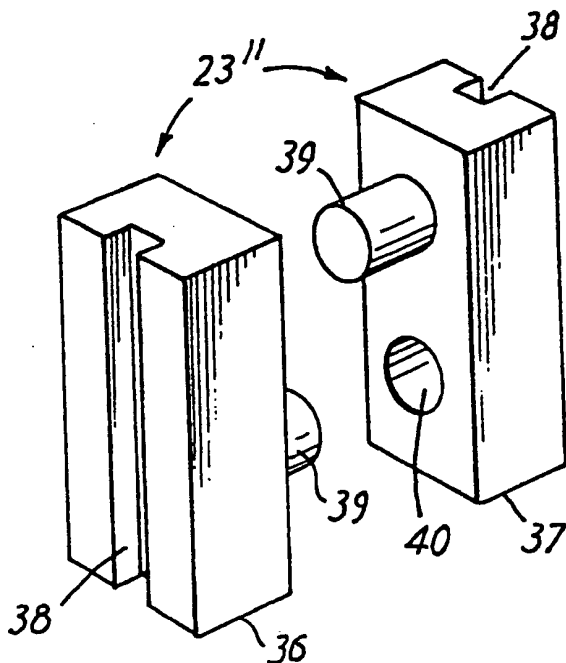


FIG. 9

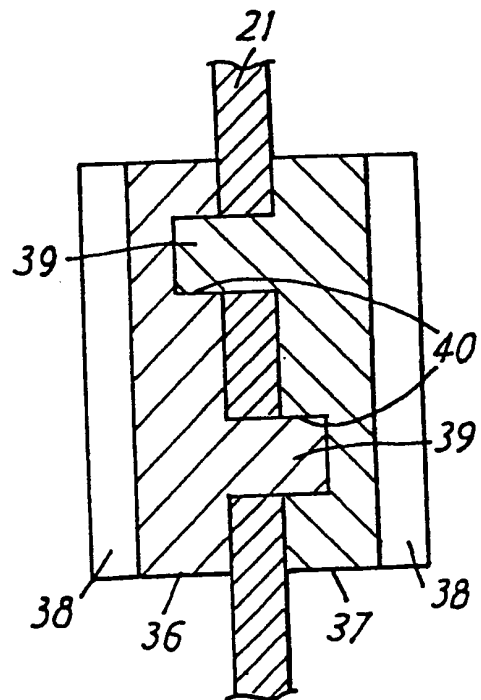


FIG. 10

SPECIFICATION

Systems for providing divisions in drawer storage systems

The present invention relates to storage systems and is particularly concerned with systems for providing divisions in drawer storage systems.

In a known drawer storage system, wall member of L-shaped cross-section are secured to the floor of the drawer by screws which pass through the horizontal web of the wall members into pre-drilled holes in the floor of the drawer. A series of walls extending from front to back of the drawer may thus be provided.

Evenly spaced vertical slots are provided along the length of the walls on each side of the walls for receiving the end of dividers which divide the spaces between adjacent walls into smaller compartments. In the known arrangement these slots are provided by welding corrugated strips of metal to the wall of the sides of the wall members. The corrugations extend horizontally and the crests of the corrugations are cut to provide the vertical slot. One or two corrugations are usually sufficient for each side of the wall.

The disadvantage of such an arrangement is that to provide the slots in this way is expensive because of the extra materials used for the corrugated strips and the extra work involved in spot welding them to the walls. It also reduces the usable space in the drawer.

It is the object of the present invention to avoid these disadvantages.

According to the present invention there is provided a system for dividing drawers comprising wall members for dividing the space in the drawer in a first direction and dividers for dividing the spaces between adjacent pairs of wall members in a second direction at right angles to the first, each wall member including a series of horizontally spaced apertures for receiving inserts, each insert including a slot, whereby inserts can be inserted into selected apertures in the wall members so as to provide slots for locating the ends of the dividers.

Embodiments of the invention will now be described by way of example with reference to the accompanying drawings of which:—

Fig. 1 shows a perspective view of a drawer fitted with a system of dividers in accordance with the invention;

Fig. 2 shows a vertical cross-section through a wall member of the system of Fig. 1;

Fig. 3 shows an elevation of the wall member of Fig. 2;

Fig. 4 shows an elevation of an alternative form of wall member;

Fig. 5 shows a perspective view of an insert for use with the wall member of Fig. 3;

Fig. 6 shows an elevation of the insert of Fig. 5 in the wall member of Fig. 3;

Fig. 7 shows a perspective view of an insert for use with the wall member of Fig. 4;

Fig. 8 shows a vertical cross-section of the

insert of Fig. 7 in the wall member of Fig. 4;

Fig. 9 shows a perspective view of an alternative insert for use with the wall member of Fig. 4; and

Fig. 10 shows a vertical cross-section of the insert of Fig. 9 in the wall member of Fig. 4.

Referring to Fig. 1 this shows a metal drawer 11 with front and back walls 12 and 13, side walls 14 and a floor 15. The drawer is divided into sections extending from front to back, by wall members 16. The wall members have an L-shaped cross-section (see Fig. 2). The wall members 16 are secured to the floor of the drawer by screws 17 which pass through holes 18 in the horizontal web 19 of the wall members 16, and into selected rows pre-drilled holes 20 in the floor 15 of the drawer.

The vertical web 21 of the wall member has a horizontal row of evenly-spaced apertures 22 for receiving inserts 23. The inserts 23 can be inserted into selected pairs of opposing apertures in adjacent wall members to provide slots for locating the ends of dividers 24, which divide the spaces between adjacent wall members into a column of smaller compartments 25. Various arrangements of apertures and inserts are possible.

In the arrangement of Fig. 3 the apertures 22 are rectangular with their major axis vertical. The apertures 22 typically may have a height of 20 mm and a width of 10 mm. The pitch of the slots may be 30 mm.

The insert 23 for use in the slot is shown in Figs. 5 and 6. The overall height of the insert may be 19 mm and its width may be very slightly less than 10 mm. Its thickness is 11 mm. The insert 23 has an H-shaped cross-section when viewed in plan having two slots or grooves 26 running down the entire length of two opposite faces. Each groove is slightly less than 2 mm wide and about 4 mm deep. Extending at right angles to the plane of the grooves 26 is a slot 27 which extends half way up the insert. The slot is about 1 mm wide. The insert is made of plastics material.

In use the insert is inserted into a selected aperture 22 in the wall member 16 from the side and then pressed downwardly so that the lower part of the insert straddles the bottom edge of the aperture 22. The grooves 26 provide vertical slots on opposite sides of the wall member for receiving the ends of dividers. An insert is inserted into the aperture of the adjacent wall member immediately opposite to locate the other end of each divider.

Fig. 4 shows an alternative arrangement of apertures. Two rows of round apertures 22' are stamped in the vertical web 21 of the wall members 16 one above the other. Pairs of apertures 22' are located vertically above one another. The horizontal pitch of the apertures may be 30 mm as in the case of the embodiment of Fig. 3, but the size of the apertures can be much smaller, say 3—5 mm diameter. The vertical spacing may be approximately 10 mm.

Various arrangements of inserts can be used with the wall member of Fig. 4. One kind of insert

is shown in Figs. 7 and 8. The insert 23' is formed in two parts 30 and 31. Each part has a vertical groove 32 in its outer surface for receiving one end of a divider. On the opposite face of the part 30 are two vertically spaced tubular projections 32 and on the opposite face of the part 31 are two vertically spaced projections 33. The spacing of the projections corresponds to the vertical spacing of the apertures. The outside diameter of the projections 32 is such that they are a friction fit in the apertures 22'. They may have a slight reverse taper to assist in holding them in the apertures. The length of the tubular projections 32 is equal to the thickness of the wall members 16. The projections 33 on the part 31 have a diameter which corresponds to the internal diameter of the tubular projections. The bores 34 in the tubular projections 32 extend back into the body of the part 30 so as to accommodate the projections 33 which are longer than the projections 32. The projections 33 may be held in the bore in the tubular projection by friction, in which case it may be given a slight taper. Alternatively they may be a snap fit with circumference grooves and projections on respective parts of the projections 33 and bores 34. In use the projections 32 are first inserted into the selected apertures 22' in the wall member and then the projections 33 are inserted into the bores 34 in the projections 32.

An alternative construction of insert for use with the wall member of Fig. 4 is shown in Figs. 9 and 10. The insert 23" is formed of two identical parts 36 and 37. Each part has a vertical groove 38 in one surface for receiving one end of a divider. On the opposite surface of each part are a projection 39 and a complementary recess 40. The projection and recess are equidistant from the horizontal median plane. In use the two parts 36 and 37 are offered up to the wall member 16 from opposite sides, one of the parts having its projection 39 at the top, the other having its projection 39 at the bottom.

The projections 39 are inserted through a pair of apertures 22' and into the complementary recess 40 of the other part. The projections are held in the recess either by friction or by a snap fit.

When the inserts of Fig. 7 and 8 or Fig. 9 and 10 are in place they provide a pair of grooves or slots for receiving the ends of dividers in the same manner as the insert of Figs. 5 and 6.

It will be appreciated that many variations of this arrangement are possible. For example separate inserts may be provided for the upper and lower apertures in the arrangement of Fig. 4. The projections and recess of the embodiment of Figs. 9 and 10 may be replaced by projections as

in the embodiment of Figs. 7 and 8.

CLAIMS

1. A system for dividing drawers comprising wall members for dividing the space in the drawer in a first direction and dividers for dividing the spaces between adjacent pairs of wall members in a second direction at right angles to the first, each wall member including a series of horizontally spaced apertures for receiving inserts, each insert including a slot, whereby inserts can be inserted into selected apertures in the wall members so as to provide slots for locating the ends of the dividers.
2. A system according to claim 1 in which the wall members have an L-shaped cross-section, the wall member being secured to the floor of the drawer by one web of the section and the said apertures being provided in the other web.
3. A system according to claim 1 or 2 in which the apertures are rectangular.
4. A system according to claim 1 or 2 in which each wall member includes two rows of horizontally spaced apertures located one above the other, each insert being inserted through a pair of apertures, one in the upper row and one in the lower row.
5. A system according to claim 3 in which the insert is adapted to be inserted into the selected aperture and then pressed downwardly so that a slot in the underside of the insert receives the lower edge of the aperture.
6. A system according to any of claims 1 to 4 in which each insert is formed in two parts, one part having a projection or projections which is inserted through the selected aperture and the other part having a recess for receiving the projection and which is a snap or friction fit with the projection to retain the insert in place.
7. A system according to any of the preceding claims in which each insert has a vertical slot in two opposite sides thereof.
8. A system according to claims 6 or 7 when appendant to claim 4 in which each insert has two projections and two recesses for receiving the projections, a projection passing through a selected aperture in each of the rows of apertures.
9. A system according to claim 8 in which each part of the insert carries one of the projections and one of the recesses.
10. A system substantially as hereinbefore described with reference to the accompanying drawings.
11. A drawer fitted with a system according to any of the preceding claims.